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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/494,067	01/28/2000	Rama Murty Kalluri	OPTVP009	3003

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RORY D. RANKIN
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398

EXAMINER

SRIVASTAVA, VIVEK

ART UNIT	PAPER NUMBER
2611	14

DATE MAILED: 05/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/494,067	KALLURI ET AL.
	Examiner	Art Unit
	Vivek Srivastava	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 December 2002.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-36 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-3,8,12,13,15,16,21,25-28 and 33 is/are rejected.

7) Claim(s) 4-7,9-11,14,17-20,22-24,29-32 and 34-36 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>11</u> .	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Response to Arguments

[A] Applicant's argue that Rasmussen fails to teach (1) modifying the value of the display position code of each slice of each of the received MPEG-encoded video streams as necessary (independent claim 1), (2) "an interactive decoder adapted...to modify the display position code of each slice of each of a received MPEG-encoded video streams as necessary (independent claim 12), (3) "means for modifying the value of the display position code of each slice of each of the received MPEG-encoded video streams as necessary (independent claim 25). Applicant further argue that the Examiner has failed to show the step of "modifying the display position".

The Examiner maintains modifying the display position code is not a novel feature and is well known in the art. A reference supporting this novel feature has been provided by the Examiner (see Sato et al, in particular col 5 lines 13-25). As a result, the Applicant's arguments are not persuasive.

[B] Applicant further argues that Rasmussen teaches away from modifying the display position of each slice.

The Examiner respectfully disagrees. Rasmussen teaches that the images should be displayed in the proper position relative to the other scaled images which is different from modifying the display locations. in other words, Rasmussen teaches the importance of displaying the images in the proper position relative to the other images.

The Examiner respectfully submits that by modify the display positions of the images, the images can still be displayed in the proper position relative to the other images. Further, the column cited by Applicant's, in particular, col. 2 lines 20-24, simply states assigning a final display location, in does not teach away from modifying the display locations, the display locations can be modified before assigning a final display location. As a result, the Applicant's arguments are not persuasive.

Claim Rejections - 35 U.S.C. § 103

I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

II. Claims 1-3, 8, 12, 13, 15, 16, 21, 25, 27, 28 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen (5,995,146).

As to claim 1, note the Rasmussen reference which discloses a video communications system for transmitting video data between a plurality of transmitting nodes and one or more receiving nodes 60. Particularly, the combiner 70, Figures 1 and 4, receives transport streams from several locations which have been packetized as service data units and arranged for transmission as the payloads of ATM cells. The program information data associated with transport stream cells allow the combiner 70 to determine the source of the picture data and to separate the different MPEG video

channels. The cells are thus sorted into appropriate memory locations, and the elementary stream (ES) payloads and necessary header information are extracted. As set forth in Figure 4 and the disclosure of col. 6 lines 29+, the combiner 70 operates such that following de-packetization, the sequence context information reader 74 reads the sequence context information which was inserted into the encoded picture data. The sequence context information includes picture size and location information, and other coding parameters (Note the disclosure of col. 6 lines 8-20, which makes clear that prior coding process creates an ES having ES headers with reference display locations and macroblock headers with relative display locations--that is, relative to the header or to prior slices.) The memory 76 stores the encoded picture data for each transport stream, and the context information inserter 78 inserts the appropriate sequence context information into the ordered encoded picture data. The sequence context information is inserted into the ES header 220 for the combined pictures (Figure 5B), and specifies coding information such as frame rate, aspect ratio, size, and display location for the combined picture. The combiner 70 thus carries out the claimed steps of determining..., and interleaving... into a composite video stream.

Rasmussen fails to disclose the claimed modifying the value of the display position code of each slice of the received MPEG-encoded video stream as necessary. It would have been obvious a quick and efficient method for modifying the display position for MPEG slices would have been to modify the display position code of each slice. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Rasmussen to include the claimed limitation to provide a quick and efficient means for modifying the display position of slices.

As to claims 2 and 3, MPEG-2 defines MBAI VLCs or SSCs as display position codes. The reference clearly specifies coding using MPEG-2.

Claim 8 is met by that discussed above.

As to claim 12, the reference does not explicitly disclose an interactive decoder, such as that in communication with a broadcast center in a video distribution network. However, the reference does disclose that the combiner 70, which was disclosed as part of the receiving node 60, could be arranged as a shared network resource which generates a new transport stream and an ATM cell specifying the address(es) of the receiving node(s), col. 6 lines 48-53. This arrangement would be consistent with that used in an interactive video distribution network. Therefore, the Examiner submits that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to adapt the Rasmussen teachings to the interactive video distribution environment to allow for the simultaneous delivery of multiple video sequences to the user without the need for sophisticated or costly picture-in-picture elements.

Claims 13, 15, 16 and 21 are met by that discussed above.

Claims 25, 27, 28 and 33 are met by that discussed above.

Allowable Subject Matter

III. Claims 4-7, 9-11, 14, 17-20, 22-24, 29-32 and 34-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

IV. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or fairly suggest MBAI VLCs which contains 3 bits having a corresponding increment value of one of 2 and 3, the modification of the display position code such that a resulting modified MBAI VLC has a modified number

of bits (wherein the modified number of bits modulo 8 equals the original number of bits modulo 8, and the modification of the display position code such that a resulting modified MBAI VLC includes a selectively added number of stuffing codes ranging from 0 to 7.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308- 5399 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Vivek
Srivastava whose telephone number is (703) 305 - 4038. The examiner
can normally be reached on Monday - Thursday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful,
the examiner's supervisor, Andy Faile, can be reached at (703) 305 -
4380.

Any inquiry of a general nature or relating to the status of this
application or proceeding should be directed to the group receptionist
whose telephone number is (703) 305 - 3900.

VS 5/2/03



VIVEK SRIVASTAVA
PATENT EXAMINER